

Reply to Office Action dated August 31, 2007

In the Claims

Please replace all prior versions, and listings, of claims in the application with the following list of claims:

1-36. (Canceled)

37. (Currently Amended) An implantable prosthesis for repairing a tissue or muscle wall defect, the implantable prosthesis comprising:

a layer of repair fabric that is susceptible to the formation of adhesions with tissue and organs, the layer of repair fabric includes a plurality of tissue infiltratable interstices that are constructed and arranged to allow tissue ingrowth thereto, the layer of repair fabric including a first surface and an outer margin with an outer peripheral edge, the outer peripheral edge having a thickness, the outer margin of the layer of repair fabric having been melted and resolidified to substantially eliminate the tissue infiltratable interstices therein and render the entire thickness of the outer peripheral edge of the layer of repair fabric substantially impervious to tissue ingrowth so that the outer peripheral edge is resistant to the formation of adhesions with tissue and organs; and

a barrier layer that inhibits tissue ingrowth and the formation of adhesions with tissue and organs thereto, the barrier layer being configured to inhibit the formation of adhesions between at least a portion of the first surface and adjacent tissue and organs.

38. (Canceled).

39. (Original) The implantable prosthesis according to claim 37, wherein the outer margin has a non-uniform thickness.

40. (Original) The implantable prosthesis according to claim 39, wherein the outer margin has a thickness that decreases in an outward direction.

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41. (Original) The implantable prosthesis according to claim 40, wherein the outer margin has a tapered shape.

42. (Original) The implantable prosthesis according to claim 37, wherein the layer of repair fabric includes an outer perimeter, the outer margin having been melted and resolidified along the entire outer perimeter.

43. (Original) The implantable prosthesis according to claim 42, wherein the barrier layer covers the entire first surface of the layer of repair fabric.

44. (Original) The implantable prosthesis according to claim 37, wherein the layer of repair fabric and the barrier layer are connected by at least one series of stitches.

45. (Original) The implantable prosthesis according to claim 44, wherein the series of stitches are formed from an adhesion resistant material.

46-59. (Canceled)

60. (New) The implantable prosthesis according to claim 44, wherein the series of stitches are disposed slightly inward of the outer peripheral edge.

61. (New) The implantable prosthesis according to claim 37, wherein the layer of repair fabric is a knitted mesh.

62. (New) The implantable prosthesis according to claim 61, wherein the knitted mesh is formed of polypropylene monofilament.

63. (New) The implantable prosthesis according to claim 37, wherein the barrier layer is formed of ePTFE.

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64. (New) The implantable prosthesis according to claim 37, wherein a portion of the outer margin of the layer of repair fabric is fused to the barrier layer.